

EMERGENCY MEDICAL SERVICES

I. PROGRAM OVERVIEW

An Emergency Medical Services (EMS) system that ensures prompt and effective emergency medical services to victims of motor vehicle collisions is an essential component of California's plan to reduce the number of deaths and injuries resulting from motor vehicle collisions.

According to the 2005 California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) provisional data, there were 292,673 persons in California who required EMS as a result of a serious motor vehicle collision. All of these individuals required emergency medical services at the crash scene. Many of these crash victims also required specialized rescue equipment and trained personnel to extricate them from their vehicles and/or the crash scene.

Current research and the experience of emergency physicians, trauma specialists and other EMS providers recognize that trauma patient outcomes are best when patients are identified, transported and cared for at a medical facility within the "critical hour." The "critical hour" has become a standard used to measure the effectiveness of many components of EMS. A recent assessment of California's Emergency Medical Services conducted by the Emergency Medical Services Authority (EMSA) and National Highway Traffic Safety Administration (NHTSA) reports an effective EMS system requires and provides the following:

- Reliable and accessible communications.
- Adequately trained personnel.
- Life saving medical and rescue equipment.
- Safe, reliable, and rapid emergency transportation.
- Public information and education.
- Problem identification and evaluation.

II. ACTION PLANS

Adequately trained rescue personnel with access to appropriate and reliable equipment and vehicles are critical to an EMS system's ability to effectively care for victims of motor vehicle collisions. To meet this need, OTS plans to provide grant funds to full-time, paid-call, and volunteer EMS providing agencies to purchase and/or replace unreliable ambulances and first responder/rescue vehicles, extrication equipment, air bag lifting systems, and to provide training. With California's vast rural areas, paid-call and volunteer EMS agencies benefit immensely from OTS funding for ambulances, extrication equipment, communications, and public information materials.

Public information and education are also important components of an effective EMS system. The EMS provider is in a unique position to observe, understand, and educate the public about injury prevention. OTS provides funds for programs that enhance the public's knowledge of the EMS system, demonstrate safe and appropriate response to Code 3 responding vehicles (lights and sirens).

OTS plans to provide funds to continue work on the Statewide EMS Communications Plan. The EMS communications grant will establish and implement an up-to-date and coordinated EMS communication system pilot in Imperial and San Diego counties by replacing aging and outdated equipment and installing new communication technology to integrate existing systems.

III. TASKS

TASK 1 - PROGRAM DEVELOPMENT AND ADMINISTRATIVE COORDINATION

This task provides for the necessary staff time and expenses incurred by OTS that are directly related to the planning, development, coordination, monitoring, auditing, and evaluation of grants within this program area, and the preparation of the 2007 Highway Safety Plan. Funding is also provided in this task for the printing of brochures and pamphlets, distributing literature and media materials developed through successful grants, or obtained from other sources. Assistance is also provided under this task to individuals to attend and participate in technology transfer workshops, training sessions, or educational meetings or conferences.

TASK 2 - FIRST RESPONDER SERVICES

Timely access to the appropriate equipment and medical supplies is essential to the EMS provider's ability to meet the needs of the motor vehicle collision victim. New automobile materials, technology, and alternative fuels create additional hazards and challenges for the EMS provider at the scene of a motor vehicle collision. Specialized equipment (hydraulic extrication tools, air bag lift systems) and training can make the difference between a patient receiving medical treatment within the critical "golden hour" or not. Removal of a victim trapped in the vehicle can average more than an hour without appropriate tools; with the use of hydraulic tools, the average extrication time is 15 minutes. The goals of these grants are to improve EMS delivery to traffic collisions victims and to reduce response times for the arrival of appropriate equipment to the scene and/or the extrication of collision victims.

Those grants with a () following the agency name are regional grants. A regional grant is multi-jurisdictional, addressing the equipment and training needs of City Fire Departments, Volunteer Fire Departments, Fire Protection Districts and County Fire Departments. The number in the () specifies the number of jurisdictions participating in the grant.

Grant #	Fund	Agency	FFY 2007 Funds
EM0702	157	Atascadero (8)	\$249,250
EM0703	157	Tulare County (8)	\$113,000
EM0705	157	Santa Cruz County (12)	\$320,000
EM0709	157	South Lake County (22)	\$74,081
EM0605	157	Kern County (10)	\$39,500
EM0710	157	Kern County (10)	\$208,683
EM0712	157	Humboldt County (3)	\$49,360
EM0608	157	El Cajon (3)	\$6,000
EM0609	157	East Bay Regional Park District (4)	\$3,000
EM0701	157	Marin County (8)	\$103,973
EM0704	157	Sonoma Valley Firemed System (2)	\$94,315
EM0706	157	Calaveras County (10)	\$346,200
EM0707	157	Grass Valley (3)	\$188,000
EM0708	157	San Joaquin County (5)	\$300,000
EM0713	157	National City (2)	\$79,458
EM0715	157	East County Fire Protection District (3)	\$168,023
EM0521	402	Tulare County (4)	\$0

TASK 3 - LIFE SUPPORT DELIVERY

Safe, reliable ambulance transportation is a critical component of an effective EMS system. In rural areas, the purchase and maintenance of an ambulance is a continuing problem. Low call volume and sparse population make it difficult if not impossible to obtain the monies required to provide and maintain quality emergency medical services and transportation. Many of California's rural communities are located along heavily traveled highway corridors and in areas frequented by thousands of tourists. The distance between these communities and local trauma centers makes the availability of reliable ambulance and trained ambulance personnel critical.

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Grant #	Fund	Agency	FFY 2007 Funds
EM0610	157	Plumas County (14)	\$0
EM0717	157	Big Bear City Community Services District (1)	\$33,000

TASK 4 - DATA COLLECTION

Data collection and ready access to available data are a continuing challenge for the EMS community. Many of the state's EMS providers are collecting important data by hand or not at all. The availability and access to data enables the EMS provider to determine injury prevention strategies, program strengths and weaknesses, training needs, allows effective deployment of resources and provides information to improve patient care and outcome. There are currently no grants planned or continued under this task.

TASK 5 - COMMUNICATIONS

A reliable communications system is an essential component of an overall EMS system. Public access to emergency services is hampered in many areas by over burdened 911 systems, dead spots in wilderness and mountainous areas, and long stretches of highway with no access to telephone landline or cellular services. A variety of communications systems are currently in use (VHF, UHF, 800 MHz) in the state, many are outdated and unreliable. This variety of systems causes enormous problems with interagency operability. The EMS provider's access to reliable communication is critical to the safety of the EMS provider, effective deployment of resources and positive patient outcomes.

402

EM0008 - EMERGENCY MEDICAL SERVICES AUTHORITY STATEWIDE EMS COMMUNICATION SYSTEM PLAN PROJECT

The Statewide EMS Communication System Plan grant is continued into fiscal year 2007. This grant provides funds for personnel, a communications systems consultant, repeaters and other communications and computer equipment. The goals of this grant are to establish and implement an up-to-date and integrated EMS communication system statewide and to improve EMS communication system statewide through the replacement of out-dated and aging technology. (\$149,751)

EM0341 - IMPERIAL VALLEY EMERGENCY COMMUNICATIONS AUTHORITY LOCAL EMERGENCY MEDICAL SERVICES COMMUNICATIONS SYSTEM PLAN PROJECT

The Local Emergency Medical Services Communications System Plan grant is continued into fiscal year 2007. Imperial Valley Emergency Communications Authority (IVECA) is implementing a plan for an intra- and inter- county EMS communication system to foster coordinated EMS communications between regions and counties, public and private providers, hospitals and public safety agencies in the area. IVECA also works with the Emergency Medical Services Authority (EMS Authority) to develop a local EMS Communications Plan template that will be integrated into the State EMS Communications Plan and used as a model for local communications systems throughout the state. (\$0)

TASK 6 - TRAINING

EMS personnel can perform their mission only if adequately trained and available in sufficient numbers throughout the State. Rescue personnel with First Responder, EMT and Paramedic training can mean the difference between life and death for motor vehicle collision victims. This is especially true in rural areas, and highly congested metropolitan areas where distance and congested traffic conditions critically increase the time required to arrive at the crash scene, extricate and transport victims.

157

EM0613 - MAYERS MEMORIAL HOSPITAL REGIONAL EMS TRAINING CONFERENCE PROGRAM

Mayers Memorial Hospital will serve as the host agency to provide EMS training in the North State. In collaboration with Nor Cal EMS, Inc, a two-day conference will be conducted each year to emphasize topics pertinent to traffic collision response. Additional emphasis will be placed on training attendees how to deliver new topics once they return home, and how to make all of their training more effective. Some blocks may be located offsite for effectiveness or safety. These might include EVOC (Emergency Vehicle Operator Course), helicopter operations and safety demonstrations, airbag, bumper and other vehicle safety demonstrations. The grant will be designed to provide affordable recurring conferences in the region after the grant's end. (\$44,355)

TASK 7 - PUBLIC AWARENESS AND EDUCATION PROGRAMS

Public information and education is a key component of an effective EMS system. The EMS provider is in a unique position to observe, understand and educate the public about injury prevention. These programs enhance the public's knowledge of the EMS system, support appropriate use of system access (911), demonstrate essential self-help and appropriate bystander care actions and encourage injury prevention. There are currently no grants planned or continued under this task.